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10/763,011	01/22/2004	Osamu Kizaki	RCOH-1069	6232

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EXAMINER

EBRAHIMI DEHKORDY, SAEID

ART UNIT	PAPER NUMBER
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2625

MAIL DATE	DELIVERY MODE
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02/27/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/763,011

Applicant(s)

KIZAKI ET AL.

Examiner

Saeid Ebrahimi-dehKordy

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-99 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-44, 97 and 98 is/are allowed.
- 6) ☒ Claim(s) 45-52, 57-67, 76-78, 82, 83, 94 is/are rejected.
- 7) ☒ Claim(s) 53-56, 68-75, 79-81, 84-93, 95, 96 and 99 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 45-52, 57, 60, 63, 76-78, 82-83 and 94 rejected under 35 U.S.C. 102(e) as being anticipated by Chrisop et al (Pub. No: US 20060015756)

Regarding claim 45, 52, 57, 60, 63 Chrisop et al disclose: An image forming apparatus connected to at least one of other image forming devices (note page 3, paragraph 0031) comprising: a memory unit for storing print data (note page 3, paragraph 0031, lines 3-4, also note page 3, paragraph 0037, lines 1-4) a collaboration unit connected to the one of the image forming devices for transmitting transmission data for the stored print data to and receiving from the one of the image forming devices (note page 3, paragraph 0025, where the collaboration is inherent as when the copier get the results of the completion of the data from the printer, this would be the collaboration section which would inform the copier that the task have been completed, also note page 5, claim 1) and a removing unit connected to said memory unit for removing the stored print data from said memory unit (note page 3, paragraph 0036, lines 10-17, wherein the data stored in the memory would be deleted or erased from the memory after the completion of the task) wherein said collaboration unit receives a complete report indicative of a

print process at the one of the image forming devices (note page 3, paragraph 0025, where the collaboration is inherent as when the copier get the results of the completion of the data from the printer, this would be the collaboration section which would inform the copier that the task have been completed, also note page 5, claim 1) Wherein said removing unit removes the stored print data from said memory unit based upon the received complete report when said removing unit determines that the print process is complete at the one of the image forming devices and the image forming apparatus if the image forming apparatus and the one of the image forming devices share the print process (note page 3, paragraph 0036, lines 10-17, wherein the data stored in the memory would be deleted or erased from the memory after the completion of the task).

Regarding claim 46 Chrisop et al disclose: The image forming apparatus according to claim 45 wherein the print process is a sort print process (note Fig Fig.5, page 4, paragraphs 0041-0044).

Regarding claim 47 Chrisop et al disclose: The image forming apparatus according to claim 45 wherein the print process is a stack print process (note Fig.1, page 3, paragraphs 0036-0037).

Regarding claim 48 Chrisop et al disclose: The image forming apparatus according to claim 47 wherein said collaboration unit transmits a removal request to the one of the image forming devices for removing the stored print data for a requested number of copies that has been completed if the image forming apparatus and the one of the image forming devices share the print process (note page 3, paragraph 0025, where the collaboration is inherent as when the copier get the results of the completion of the data from the printer, this would be the collaboration section which would inform the copier that the task have been completed, also note page 5, claim 1).

Regarding claim 49 Chrisop et al disclose: An image forming apparatus connected to at least

one of other image forming devices, comprising: a collaboration unit connected to the one of the image forming devices for transmitting transmission data for print data to and receiving from the one of the image forming devices (note page 3, paragraph 0025, where the collaboration is inherent as when the copier get the results of the completion of the data from the printer, this would be the collaboration section which would inform the copier that the task have been completed, also note page 5, claim 1) a memory unit connected to said collaboration unit for storing the print data (note page 3, paragraph 0031, lines 3-4, also note page 3, paragraph 0037, lines 1-4) a printing unit connected to said memory unit for printing the print data (note Fig.1 where in the stored data is printed at the step 125) and a removing unit connected to said memory unit for removing the stored print data from said memory unit (note page 3, paragraph 0036, lines 10-17, wherein the data stored in the memory would be deleted or erased from the memory after the completion of the task) wherein said collaboration unit receives a complete report indicative of a print process at the one of the image forming devices (note page 3, paragraph 0025, where the collaboration is inherent as when the copier get the results of the completion of the data from the printer, this would be the collaboration section which would inform the copier that the task have been completed, also note page 5, claim 1) wherein said removing unit removes a portion of the stored print data from said memory unit if the image forming apparatus and the one of the image forming devices share the print process, the portion being allocated for printing at the image forming apparatus and having been printed (note page 3, paragraph 0036, lines 10-17, wherein the data stored in the memory would be deleted or erased from the memory after the completion of the task).

Regarding claim 50 Chrisop et al disclose: The image forming apparatus according to claim 49

wherein said collaboration unit receives a data removal request from the one of the image forming devices for a requested number of copies that has been completed at the one of the image forming devices, said removing unit removing a portion of the stored print data from said memory unit, the portion corresponding to the data removal request (note page 3, paragraph 0036, lines 10-17, wherein the data stored in the memory would be deleted or erased from the memory after the completion of the task).

Regarding claim 51 Chrisop et al disclose: The image forming apparatus according to claim 49 wherein said collaboration unit asks the one of the image forming devices for a print permission for each copy of the stored print data, said removing unit removing a portion of the stored print data, the portion corresponding a total of copies that includes copies that are not permitted for printing and copies that have been already printed at the image forming apparatus (note page 2, paragraph 0022).

Regarding claim 76 Chrisop et al disclose: The method of collaboration in an image forming device network system according to claim 63 wherein the image data is removed from the parent device when the collaboration print job between the child device and the parent device is completed (note page 3, paragraph 0025).

Regarding claim 77 Chrisop et al disclose: The method of collaboration in an image forming device network system according to claim 63 further comprising an additional step of selecting the collaboration mode or a single operation mode for a print job (note page 3, paragraph 0038-0040).

Regarding claim 78 Chrisop et al disclose: The method of collaboration in an image forming device network system according to claim 65 further comprising an additional step of comparing

the remaining memory amount in the child device and a size of the image data to generate a comparison result (note page 4, paragraphs 0041-0043).

Regarding claim 82 Chrisop et al disclose: The method of collaboration in an image forming device network system according to claim 63 further comprising an additional step of distributing the collaboration print job to a selected one of the child devices based upon availability and a current load amount (note page 3, paragraphs 0038-0040).

Regarding claim 83 Chrisop et al disclose: The method of collaboration in an image forming device network system according to claim 82 further comprising an additional step of monitoring a remaining resource at the parent device and each of the child devices (note page 3, paragraph 0025).

Regarding claim 94 Chrisop et al disclose: The method of collaboration in an image forming device network system according to claim 63 wherein the parent device transfers the image data from a last portion and the child device prints the image data from the last portion in a stack mode during the collaboration mode (note page 4, paragraphs 0041-0043).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002

do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 58 and 61 are rejected under 35 U.S.C. 102(e) as being anticipated by Tullis (U.S. patent 6,625,561)

Regarding claim 58, 61 Tullis discloses: A method of collaboration between an image forming apparatus and image forming devices, comprising the steps of: monitoring information on image forming devices connected to the image forming apparatus (note column 5, lines 13-25) estimating an amount of necessary paper based upon a currently executing job and reserved jobs (note column 11, lines 19-44) comparing the estimated paper amount and a remaining paper amount to generate a comparison result (note column 11, line 55 to column 12, line 15) determining whether or not any one of the jobs is distributed based upon the monitored information in case the comparison result indicates a lack of the remaining paper amount (note column 11, lines 63 to column 12, lines 15) displaying job distribution information if the job is to be distributed to any one of the image forming devices (note Fig.16, column 13, line 43 to column 14, line 9) transferring image data for the distributed job to the selected image forming device (note Fig.11, column 9, lines 15-57) displaying the job distribution information if the job has been distributed to the selected image forming device and executing the job at the selected image forming device (note Fig.16, column 13, line 43 to column 14, line 9, wherein the job is implemented).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 59 and 62 rejected under 35 U.S.C. 102(e) as being anticipated by Phillips (Pub. No: US 20020141765)

Regarding claim 59, 62 Phillips discloses: A method of collaboration between an image forming apparatus and image forming devices, comprising the steps of: monitoring information on image forming devices connected to the image forming apparatus (note abstract, also note page 1, paragraph 0007) estimating an amount of necessary toner based upon a currently executing job and reserved jobs (note page 1, paragraph 0007, lines 10-24) comparing the estimated toner amount and a remaining toner amount to generate a comparison result (note abstract, also note page 4, paragraph 0039) determining whether or not any one of the jobs is distributed based upon the monitored information in case the comparison result indicates a lack of the remaining toner amount (note page 4, paragraphs 0037-0039) displaying job distribution information if the job is to be distributed to any one of the image forming devices transferring image data for the distributed job to the selected image forming device (note page 2 paragraph 0023) displaying the job distribution information if the job has been distributed to the selected image forming device; and executing the job at the selected image forming device (note Fig.2,

page 3, paragraph 0027-0034).

101Regarding claim 60. A computer readable program for collaboration between an image forming apparatus and image forming devices, comprising the tasks of: monitoring information on image forming devices connected to the image forming apparatus; estimating a memory amount based upon a currently executing job and reserved jobs; comparing the estimated memory amount and a remaining memory amount to generate a comparison result; determining whether or not any one of the jobs is distributed based upon the monitored information in case the comparison result indicates a lack of memory; displaying job distribution information if the job is to be distributed to any one of the image forming devices; transferring image data for the distributed job to the selected image forming device; displaying the job distribution information if the job has been distributed to the selected image forming device; and executing the job at the selected image forming device.

101Regarding claim 61. A computer readable program for collaboration between an image forming apparatus and image forming devices, comprising the tasks of: monitoring information on image forming devices connected to the image forming apparatus; estimating an amount of necessary paper based upon a currently executing job and reserved jobs; comparing the estimated paper amount and a remaining paper amount to generate a comparison result; determining whether or not any one of the jobs is distributed based upon the monitored information in case the comparison result indicates a lack of the remaining paper amount; displaying job distribution information if the job is to be distributed to any one of the image forming devices; transferring image data for the distributed job to the selected image forming device; displaying the job distribution information if the job has been distributed to the selected image forming device; and

executing the job at the selected image forming device.

101Regarding claim 62. A computer readable program for collaboration between an image forming apparatus and image forming devices, comprising the tasks of: monitoring information on image forming devices connected to the image forming apparatus; estimating an amount of necessary toner based upon a currently executing job and reserved jobs; comparing the estimated toner amount and a remaining toner amount to generate a comparison result; determining whether or not any one of the jobs is distributed based upon the monitored information in case the comparison result indicates a lack of the remaining toner amount; displaying job distribution information if the job is to be distributed to any one of the image forming devices; transferring image data for the distributed job to the selected image forming device; displaying the job distribution information if the job has been distributed to the selected image forming device; and executing the job at the selected image forming device.

REGARDING CLAIM 63. A method of collaboration in an image forming device network system, a parent device scanning an image to generate image data and to store the image data, the parent device reading the image data and forming an image on an image-transferring medium, the parent device transferring the image data to a selected one of child devices that are connected to the parent device through a network, the child device storing the image data that has been transferred from the parent device reading the transferred image data to form an image on an image-transferring medium, the method comprising the steps of: activating a collaboration mode for a collaboration print job between the child device and the parent device; receiving at the child device the image data that is transferred from the parent device to the child device; and initiating the collaboration print job only after an entire portion of a predetermined size of the

transferred image data for the collaboration print job is stored in the child device.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 64-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chrisop et al (Pub. No: US 20060015756) in view of Niitsuma (Pub. No: US 20020109860)

Regarding claim 64 Chrisop et al do not clearly disclose: The method of collaboration in an image forming device network system according to claim 63 further comprising an additional step of detecting a remaining amount of memory in the parent device. On the other hand Niitsuma discloses: The method of collaboration in an image forming device network system according to claim 63 further comprising an additional step of detecting a remaining amount of memory in the parent device (note page 5, paragraph 0070 lines 1-14). Therefore it would have been obvious to a person of ordinary skill in art at the time of the invention to modify Chrisop et al's invention according to the teaching of Niitsuma, Where Niitsuma teaches the way remaining of the memory space is determined to help the transmission of the data and optimizing the capability of the system.

Regarding claim 65 Niitsuma discloses: The method of collaboration in an image forming device network system according to claim 63 further comprising an additional step of detecting a remaining amount of memory in the child device (note page 5, paragraph 0070).

Regarding claim 66 Niitsuma discloses: The method of collaboration in an image forming

device network system according to claim 65 wherein if a predetermined remaining memory level in the child device is detected, a memory full signal is generated and the memory full signal is reported to the parent device (note page 2, paragraph 0019).

Regarding claim 67 Niitsuma discloses: The method of collaboration in an image forming device network system according to claim 66 further comprising an additional step of interrupting the transfer of the image data to the child device via the network upon receiving the memory full signal (note page 2, paragraph 0019, lines 1-12).

Claim Rejections - 35 USC § 101

9. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 60-62 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claims 60-62 defines a computer program embodying functional descriptive material. However, the claim does not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., “When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized” – Guidelines Annex IV). That is, the scope of the presently claimed a computer program can range from paper on which the program is written, to a program simply contemplated and memorized by a person. The examiner suggests amending the claim to embody the program on “computer-readable

medium” or equivalent in order to make the claim statutory. Any amendment to the claim should be commensurate with its corresponding disclosure.

Allowable Subject Matter

10. Claims 1-44, 97-98 are allowed.
11. Claims 53-56, 68-75, 79-81, 84-93, 95-96 and 99 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

CONTACT INFORMATION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saeid Ebrahimi-dehKordy whose telephone number is 571-272-7462. The examiner can normally be reached on Mon-Fri, 8:00am-6:00pm.

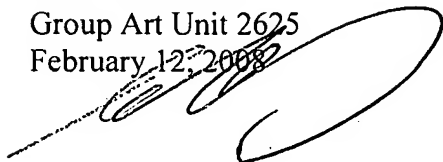
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (TN USA OR CANADA) or 571-272-1000.

Application/Control Number:
10/763,011
Art Unit: 2625

Page 14

Saeid Ebrahimi
Patent Examiner
Group Art Unit 2625
February 12, 2008

A handwritten signature in black ink, appearing to be 'Saeid Ebrahimi', written over the printed name and date.